

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested. .

Claims 1-54 are pending in this application. Claims 36-38 and 40-44 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. patent 5,377,051 to Lane et al. (herein "Lane") in view of Official Notice. Claim 39 was rejected under 35 U.S.C. §103(a) as unpatentable over Lane and Official Notice as applied to Claims 36-38, and further in view of U.S. patent 5,659,654 to Nagasawa et al. (herein "Nagasawa"). Claims 1-35 and 45-54 were noted as reciting allowable subject matter.

Initially, applicants gratefully acknowledge the indication of the allowable subject matter in claims 1-35 and 45-54.

Addressing now the rejection of claims 36-38 and 40-44 under 35 U.S.C. §103(a) as unpatentable over Lane in view of Official Notice, and the further rejection of Claim 39 further in view of Nagasawa, those rejections are traversed by the present response.

Initially, applicants note independent claims 36 and 44 are amended by the present response to clarify features recited therein.¹ Specifically, independent claim 36 now clarifies that the first data is "temporally continuous". Independent claim 36 now also recites the second data is "random access data". Independent claim 44 is amended by the present response to recite similar features. Those claimed features were previously recited in claims 38 and 39, and thus do not raise any new issues, and also do not present any subject matter beyond that previously presented and covered by the previously filed Reissue declaration. Thus, the claim amendments are not believed to raise any issues that would preclude their entry as the claim amendments reflect features previously presented, nor are the claim amendments believed to recite any features that would require a supplemental reissue declaration.

¹ The attached Appendix also shows the specifics of the presently submitted claim amendments.

Further, dependent claims 37 and 38 are amended by the present response to now also recite features from previously presented dependent claim 39, and thereby the amendments to claims 37 and 38 are also not believed to raise any new issues or to require filing of a supplemental reissue declaration.

Applicants respectfully submit none of the cited art teaches or suggests identifying between first data that is temporally continuous and second data that is random access data.

The basis for the outstanding rejection cites Lane to disclose first data that appears to be conventional data and second data that is trick play data. The basis for the outstanding rejection to go on to note that in Lane the first conventional data is intraframe data, which the outstanding Office Action states “is known to be temporally continuous. (See the trick play data disclosed in the Lane et al.)”.² Further with respect to features such as recited in previous dependent claim 39, and as now recited in amended independent claims 36 and 44, the outstanding Office Action states:

Nagasawa et al discloses a recording/reproducing apparatus that discloses the capability of recording/reproducing two different data streams wherein one of the data stream is random access data other than video and/or audio data as specified in claim 39. (Applicant is directed to the recording the still image data as shown in Nagasawa et al’s Figures 1A-1C).³

The above-noted grounds for the outstanding rejection are traversed as no combination of teachings of Lane in view of Official Notice and Nagasawa discloses identifying between first data that is temporally continuous and second data that is random access data.

One feature in the above-noted claims as currently written is to allow efficient data reproduction of two types of data, for example which can be recorded on a recording surface.

² Office Action of December 23, 2004 (which rejection was incorporated in the outstanding Office Action of July 28, 2005) at page 4, lines 8-9.

³ Office Action of December 23, 2004, page 5, last full paragraph.

The first data may be data for which continuous reading is important, and thereby that data is written to be temporally continuous and is reproduced as temporally continuous. The second type of data may be data for which reliability is of a higher priority, and that second data may be random access data, i.e., not temporally continuously recorded or reproduced. No combination of teachings of any of the cited art discloses or suggests such a combination of features.

As noted above the outstanding Office Action in one instance appears to cite Lane disclosing first data being intraframe data and second data being interframe data. However, in that respect applicants note Lane does not appear to disclose or suggest any instance in which the indicated first or second data is recorded differently with respect to being temporally continuous or not. That is, Lane does not appear to disclose or suggest any structure in which that first intraframe data is temporally continuous and the second interframe data is random access data. Thus, no teachings in Lane are directed to the above-noted claimed features.

Further, the teachings in Nagasawa are unrelated to the noted claimed features. That is, Nagasawa does not disclose or suggest any structure in which first and second data is recorded differently with respect to being temporally continuous, such that the first data is temporally continuous and the second data is random access data. As such, no combination of teachings of Lane and Nagasawa would meet such features. Moreover, a mere showing that data can be recorded as random access data even if combined with the teachings in Lane would not at all suggest to one of ordinary skill in the art identifying between first and second data by a single data reproducing apparatus in which the first data is temporally continuous and the second data is random access data. It clearly could not have been suggested to one of ordinary skill in the art to combine the teachings in Nagasawa to only the second data in Lane as clearly Nagasawa does not provide such a teaching.

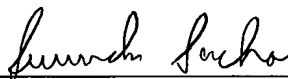
Moreover, applicants note that the position for which Official Notice is taken is not at all understood. That is, it is not at all clear what specific teaching is cited for Official Notice. In that respect applicants also traverse the Official Notice and require that prior art be cited for the proposition taken therein, although again as noted above it is unclear how Official Notice is actually being cited.

In view of these foregoing comments, applicants respectfully submit each of independent claims 36 and 44, and the claims dependent therefrom, distinguish over the applied art to Lane in view of any Official Notice and further in view of Nagasawa.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Bradley D. Lytle
Attorney of Record
Registration No. 40,073
Surinder Sachar
Registration No. 34,423

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)
SNS/rac

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APPENDIX

1. A data recording apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds; and

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited to a replacement sector and whereby in said second method the recording of the second data is not limited to a replacement sector.
2. The data recording apparatus according to claim 1, wherein the first data are those closely correlated, and the second data are those not correlated.
3. The data recording apparatus according to claim 2, wherein the first data are temporally continuous.
4. The data recording apparatus according to claim 1, wherein the first data are composed of audio and/or video data streams, and the second data are random access data other than audio and/or video data streams.
5. The data recording apparatus according to claim 1, wherein said recording means records, in said recording medium, the first data and the second data as a file.
6. The data recording apparatus according to claim 5, further comprising a storage means for storing specific extender information which represents a file kind assigned to said

file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

7. A data recording apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium, wherein said recording means records in said recording medium the first data and the second data as a file; and

a storage means for storing specific extender information which represents a file kind assigned to said file,

wherein said identifying means identifies the first data and the second data on the basis of such extender information, and

wherein, when recording the first data in said recording medium, said recording means limits, by said first method, seek to a replacement sector formed at the time of formatting said recording medium.

8. A data recording method comprising the steps of:

identifying first data and second data of mutually different kinds; and

recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited to a replacement sector and whereby in said second method the recording of the second data is not limited to a replacement sector.

9. A data reproducing apparatus comprising:
- an identifying means for identifying first data and second data of mutually different kinds; and
- a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,
- whereby in said first method the first data is reproduced while limiting a number of retries and whereby in said second method the second data is reproduced while not limiting the number of retries.
10. The data reproducing apparatus according to claim 9, wherein the first data are those closely correlated, and the second data are those not correlated.
11. The data reproducing apparatus according to claim 10, wherein the first data are temporally continuous.
12. The data reproducing apparatus according to claim 9, wherein the first data are composed of audio and/or video data streams, and the second data are random access data other than audio and/or video data streams.
13. The data reproducing apparatus according to claim 9, wherein said reproducing means reproduces, as a file, the first data and the second data recorded in said recording medium.

14. The data reproducing apparatus according to claim 13, further comprising a storage means for storing specific extender information which represents a file kind assigned to said file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

15. The data reproducing apparatus according to claim 14, wherein, when reproducing the first data from said recording medium, said reproducing means limits, by said first method, an operation to inhibit a process of continuously reading out the first data.

16. The data reproducing apparatus according to claim 9, further comprising:
an error information storage means for storing error information generated when said reproducing means reproduces the first data from said recording medium; and
an interpolation means for interpolating the first data reproduced by said reproducing means, on the basis of the error information stored in said error information storage means.

17. A data reproducing method comprising the steps of:
identifying first data and second data of mutually different kinds; and
reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,
whereby in said first method the first data is reproduced while limiting a number of retries and whereby in said second method the second data is reproduced while not limiting the number of retries.

18. A data recording/reproducing apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited to a replacement sector and whereby in said second method the recording of the second data is not limited to a replacement sector; and

a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,

whereby in said first method the first data is reproduced while limiting a number of retries and whereby in said second method the second data is reproduced while not limiting the number of retries.

19. The data recording/reproducing apparatus according to claim 18, Wherein the first data are those closely correlated, and the second data are those not correlated.

20. The data recording/reproducing apparatus according to claim 19, wherein the first data are temporally continuous.

21. The data recording/reproducing apparatus according to claim 18, wherein the first data are composed of audio and/or video data streams, and the second data are random access data other than audio and/or video data streams.

22. The data recording/reproducing apparatus according to claim 18, wherein said recording means records, in said recording medium, the first data and the second data as a file; and said reproducing means reproduces, as a file, the first data and the second data recorded in said recording medium.

23. The recording/reproducing apparatus according to claim 22, further comprising a storage means for storing specific extender information which represents a file kind assigned to said file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

24. A recording/reproducing apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium, wherein said recording means records in said recording medium the first data and the second data as a file;

a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium, wherein said reproducing means reproduces as a file the first data and the second data recorded in said recording medium; and

a storage means for storing specific extender information which represents a file kind assigned to said file,

wherein said identifying means identifies the first data and the second data on the basis of such extender information, and

wherein, when recording the first data in said recording medium, said recording means limits, by said first method, seek to a replacement sector formed at the time of formatting said recording medium; and when reproducing the first data from said recording medium, said reproducing means limits, by said first method, an operation to inhibit a process of continuously reading out the first data.

25. The data recording/reproducing apparatus according to claim 18, further comprising:

an error information storage means for storing error information generated when said reproducing means reproduces the first data from said recording medium; and

an interpolation means for interpolating the first data reproduced by said reproducing means, on the basis of the error information stored in said error information storage means.

26. A data recording/reproducing method comprising the steps of:

identifying first data and second data of mutually different kinds;

recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited to a replacement sector and whereby in said second method the recording of the second data is not limited to a replacement sector; and

reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,

whereby in said first method the first data is reproduced while limiting a number of retries and whereby in said second method the second data is reproduced while not limiting the number of retries.

27. A transmission medium for transmitting a computer program used in a data recording/reproducing apparatus which records or reproduces first data and second data of mutually different kinds in or from a recording medium, said computer program having functions of:

identifying the first data and the second data;

recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited to a replacement sector and whereby in said second method the recording of the second data is not limited to a replacement sector; and

reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,

whereby in said first method the first data is reproduced while limiting a number of retries and whereby in said second method the second data is reproduced while not limiting the number of retries.

28. A data recording apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds; and

a recording means for recording the first data by a first method in said recording medium while recording the second data by a second method in said recording medium;

whereby in said first method the recording of the first data is limited from being written to a replacement sector and is enabled to be written continuously to said recording medium and whereby in said second method the recording of the second data is not limited

and is enabled to be written to a replacement sector and also continuously to said recording medium.

29. The data recording apparatus according to claim 28, wherein the first data are those closely correlated, and the second data are those not correlated.

30. The data recording apparatus according to claim 29, wherein the first data are temporally continuous.

31. The data recording apparatus according to claim 28, wherein the first data are composed of audio and/or video data streams and the second data are random access data other than audio and/or video data streams.

32. The data recording apparatus according to claim 28, wherein said recording means records, in said recording medium, the first data and the second data as a file.

33. The data recording apparatus according to claim 32, further comprising a storage means for storing specific extender information which represents a file kind assigned to said file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

34. A data recording apparatus comprising:
an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium, wherein said recording means records in said recording medium the first data and the second data as a file; and

a storage means for storing specific extender information which represents a file kind assigned to said file,

wherein said identifying means identifies the first data and the second data on the basis of such extender information, and

wherein, when recording the first data in said recording medium, said recording means limits, by said first method, seek so that recording cannot be made to a replacement sector formed at the time of formatting said recording medium.

35. A data recording method comprising the steps of:
identifying first data and second data of mutually different kinds; and
recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited from being written to a replacement sector and is enabled to be written continuously to said recording medium and whereby in said second method the recording of the second data is not limited and is enabled to be written to a replacement sector and also continuously to said recording medium.

36. (Currently Amended): A data reproducing apparatus comprising:
an identifying means for identifying first data, which is temporally continuous, and second data, which is random access data of mutually different kinds; and

a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,

whereby in said first method the first data is reproduced so as to insure continuous reproduction of the first data and whereby in said second method the second data is reproduced so as to insure the reliability of the second data.

37. (Currently Amended): The data reproducing apparatus according to claim 36, wherein the first data are ~~those closely correlated, and the second data are those not correlated~~ composed of audio and/or video data streams.

38. (Currently Amended): The data reproducing apparatus according to claim ~~37~~ 36, wherein the ~~first-second~~ data are ~~temporally continuous~~ composed of other than audio and/or video data streams.

39. The data reproducing apparatus according to claim 36, wherein the first data are composed of audio and/or video data streams and the second data are random access data other than audio and/or video data streams.

40. The data reproducing apparatus according to claim 36, wherein said reproducing means reproduces, as a file, the first data and the second data recorded in said recording medium.

41. The data reproducing apparatus according to claim 40, further comprising a storage means for storing specific extender information which represents a file kind assigned

to said file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

42. The data reproducing apparatus according to claim 41, wherein, when reproducing the first data from said recording medium, said reproducing means limits, by said first method, an operation to inhibit a reproduction process other than a process of continuously reading out the first data.

43. The data reproducing apparatus according to claim 36, further comprising:
an error information storage means for storing error information generated when said reproducing means reproduces the first data from said recording medium; and
an interpolation means for interpolating the first data reproduced by said reproducing means, on the basis of the error information stored in said error information storage means.

44. (Currently Amended) A data reproducing method comprising the steps of:
identifying first data, which is temporally continuous, and second data, which is random access data of mutually different kinds; and
reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,
whereby in said first method the first data is reproduced so as to insure continuous reproduction of the first data and whereby in said second method the second data is reproduced so as to insure the reliability of the second data.

45. A data recording/reproducing apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium, whereby in said first method the recording of the first data is limited from being written to a replacement sector and is enabled to be written continuously to said recording medium and whereby in said second method the recording of the second data is not limited and is enabled to be written to a replacement sector and also continuously to said recording medium; and

a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,

whereby in said first method the first data is reproduced so as to insure continuous reproduction of the first data and whereby in said second method the second data is reproduced so as to insure the reliability of the second data.

46. The data recording/reproducing apparatus according to claim 45, wherein the first data are those closely correlated, and the second data are those not correlated.

47. The data recording reproducing apparatus according to claim 46, wherein the first data are temporally continuous.

48. The data recording/reproducing apparatus according to claim 45, wherein the first data are composed of audio and/or video data streams, and the second data are random access data other than audio and/or video data streams.

49. The data recording/reproducing apparatus according to claim 45, wherein said recording means records, in said recording medium, the first data and the second data as a file; and said reproducing means reproduces, as a file, the first data and the second data recorded in said recording medium.

50. The recording/reproducing apparatus according, to claim 49, further comprising storage means for storing specific extender information which represents a file kind assigned to said file, wherein said identifying means identifies the first data and the second data on the basis of such extender information.

51. The data recording/reproducing apparatus according to claim 45, further comprising:

an error information storage means for storing error information generated when said reproducing means reproduces the first data from said recording medium; and

an interpolation means for interpolating the first data reproduced by said reproducing means, on the basis of the error information stored in said error information storage means.

52. A recording/reproducing apparatus comprising:

an identifying means for identifying first data and second data of mutually different kinds;

a recording means for recording the first data by a first method in said recording medium, while recording the second data by a second method in said recording medium, wherein said recording means records in said recording medium the first data and the second data as a file;

a reproducing means for reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium, wherein said reproducing means reproduces as a file the first data and the second data recorded in said recording medium; and

a storage means for storing specific extender information which represents a file kind assigned to said file,

wherein said identifying means identifies the first data and the second data on the basis of such extender information, and

wherein, when recording the first data in said recording medium, said recording means limits, by said first method, seek so that recording cannot be made to a replacement sector formed at the time of formatting said recording medium; and when reproducing the first data from said recording medium, said reproducing means limits, by said first method, the reproduction process to an operation to inhibit a process of continuously reading out the first data so as to insure the reliability of the first data.

53. A data recording/reproducing method comprising the steps of:
identifying first data and second data of mutually different kinds;
recording the first data by a first method in said recording medium while recording the second data by a second method in said recording medium,

whereby in said first method the recording of the first data is limited from being written to a replacement sector and is enabled to be written continuously to said recording medium and whereby in said second method the recording of the second data is not limited and is enabled to be written to a replacement sector and also continuously to said recording medium; and

reproducing the first data by a first method from said recording medium while reproducing the second data by a second method from said recording medium,
whereby in said first method the first data is reproduced so as to insure continuous reproduction of the first data and whereby in said second method the second data is reproduced so as to insure the reliability of the second data.

54. A transmission medium for transmitting a computer program used in a data recording/reproducing apparatus which records or reproduces first data and second data of mutually different kinds in or from a recording medium said computer program having functions of:

identifying the first data and the second data;
recording the first data by a first method in said recording medium while recording the second data by a second method in said recording medium,
whereby in said first method the recording of the first data is limited from being written to a replacement sector and is enabled to be written continuously to said recording medium and whereby in said second method the recording of the second data is not limited and is enabled to be written to a replacement sector and also continuously to said recording medium; and

reproducing the first data by a first method from said recording medium, while reproducing the second data by a second method from said recording medium,
whereby in said first method the first data is reproduced so as to insure continuous reproduction of the first data and whereby in said second method the second data is reproduced so as to insure the reliability of the second data.